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10/757,688	01/14/2004	Lisa S. Purvis	D/A3267 (1508/3940)	4094
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Gunnar G. Leinberg, Esq. Nixon Peabody LLP Clinton Square P.O. Box 31051 Rochester, NY 14603-1051				
EXAMINER				
TSUL, WILSON W				
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2178				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/757,688

**Applicant(s)**

PURVIS ET AL.

**Examiner**

WILSON TSUI

**Art Unit**

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This non final action is in response to the RCE filed on: 07/06/09.
2. Claims 1-5, 7, 9, 12, 18, and 21 are amended. Claims 1, 9, and 18 are independent claims. Claims 1-26 are pending.
3. The following rejections are withdrawn, in view of new grounds of rejection, necessitated by applicant's amendments:
  - Claims 1, 2, 4-7, 9-11, 13-16, 18-20, and 22-25 rejected under 35 U.S.C. 102(b) as being anticipated by Nakatani.
  - Claims 3, 12, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani, in view of Zlotnick.
  - Claims 8, 17, and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani, in view of Wanderski et al.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-8 remain rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regards to claim 1, the claimed "system" appears to be a "computer program per se", without hardware. Since the computer program is not embodied in a computer readable medium, the claim is not statutory. See MPEP 2106 below:

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held non statutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and thus statutory.

With regards to claims 2-8, for depending upon a rejected independent claim 1, as explained above, are rejected under similar rationale.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4-7, 9-11, 13-16, 18-20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani (US Patent: 5,438,657, issued: Aug. 1, 1995, filed: Mar. 11, 1993), in view of Niyogi et al (US Patent: 7,197,702 B2, issued: Mar. 27, 2007, filed: Jun. 13, 2003).

With regards to claim 1, Nakatani teaches: *A comparison system in a document layout processing device configured to compare one or more elements of at least a portion of an original document against the same types of elements in at least a portion*

*each of a plurality of stored documents, wherein the portion of the original document is the portion that requires adjustment or re-layout (Abstract, column 1, lines 52-67, and column 2, lines 1-37: whereas, a comparison system is adapted to compare one or more data elements of a portion of one of document against the same types of a plurality of given/stored documents , such that the portion of the original document is properly adjusted to reflect the layout of the stored/given document).*

*A determination system in the document layout processing device configured to identify a particular stored document, with the portion which is closest to the portion of the original document based on the comparing (column 2, lines 19-37: whereas the portions that are identified using the stored/given document are matched to the portion in the original document).*

*A mutation system in the document layout processing device configured to apply one or more mutators, to the portion of the original document which were applied to mutate the portion of the identified stored document, wherein the one or more mutators include at least one of a font type adjustor adapted to electronically adjust a font of the portion of the original document, at least one color adjustor adapted to electronically adjust a color of the portion of the original document, and at least one of a line spacing adjustor, at least one color adjustor and at least one section location adjustor in the portion of the original document, adapted to electronically adjust a line spacing and a section location, respectively, of the portion of the original document (whereas, as taught in column 18,*

lines 4-55: section location/layout adjustment is implemented in the portion of the original document).

However, Nakatani does not expressly teach *identify a particular stored document in the plurality of stored documents*.

Yet, Niyogi et al teaches *identify a particular stored document in the plurality of stored documents* (column 3, lines 9-13, column 6, lines 62-67, column 7, lines 51-61: whereas, a plurality of text theme documents are identified for selection of a closest control type), and *the one or more mutators include at least one of a font type adjustor adapted to electronically adjust a font of the portion of the original document, at least one color adjustor adapted to electronically adjust a color of the portion of the original document, and at least one of a line spacing adjustor, at least one color adjustor and at least one section location adjustor in the portion of the original document, adapted to electronically adjust a line spacing and a section location, respectively, of the portion of the original document* (Fig 4a, 4b, column 3, lines 10-20: whereas, color, fonts are adjusted using original document data, and furthermore, as shown in Figure 4b, control items in a section of a document, are bumped down due to the insertion of data at the top of the document).

It would have been obvious to one of the ordinary skill in the art to have modified Nakatani's method for referring to a stored document, such that a particular document among a plurality of stored documents is identified for selection, as taught by Niyogi et.al. The combination of Nakatani and Niyogi et al would have "applied themes in a

web page document in a manner that the theme may be consistently and more easily applied across multiple related documents and in which changes to the theme may be more easily applied across all related web page text documents" (Niyogi et al, column 2, lines 49-53).

With regards to claim 2, which depends on claim 1, Nakatani teaches *the system further comprising a selection system in the document layout processing device configured to select the portion of the original document for comparing* (column 18, lines 4-55: whereas, sections are selected based upon different granularity i.e. blocks)

With regards to claim 4, which depends on claim 1, Nakatani teaches *further comprising an ordering system in the document layout processing device configured to determine an order for the mutation system to apply the mutators to the original document* (column 18, lines 4-55: whereas a mutation system/layout-conversion is implemented to apply mutators for ordering an original document)

With regards to claim 5, which depends on claim 1, Nakatani teaches *further comprising an application system in the document layout processing device configured to determine which one of the one or more mutators which were used in the portion of the identified stored document are to be used by the mutation system on the original document* (Abstract: whereas, the mutators/changes- necessary to create a stored

document, are captured such that mutators are used on the original document to sustain a consistent layout)

With regards to claim 6, which depends on claim 1, Nakatani teaches *further comprising an output system which outputs the original document after application of the mutators* (Abstract: whereas, the original document is converted after application of mutators indicated from learning data)

With regards to claim 7, which depends on claim 6, Nakatani teaches an *identification system in the document layout processing device configured to identify the output system wherein one of the elements used in the comparison system is the identified output system against an output system used for each of the stored documents and wherein the determination system uses the comparison of the identified output system against an output system used for each of the stored documents in identifying the stored document with the portion which is closest to the portion of the original document* (column 18, lines 29-35: whereas, the output system identified is based upon the output system of one or more stored documents given for learning/layout-processing)

With regards to claim 9, for performing a method similar to the method performed by the system of claim 1, is rejected under similar rationale.



With regards to claim 10, for performing a method similar to the method performed by the system of claim 1, is rejected under similar rationale.

With regards to claim 11, which depends on claim 9, for performing a method similar to the method performed by the system of claim 2, is rejected under similar rationale.

With regards to claim 13, which depends on claim 9, for performing a method similar to the method performed by the system of claim 4, is rejected under similar rationale.

With regards to claim 14, which depends on claim 9, for performing a method similar to the method performed by the system of claim 5 is rejected under similar rationale.

With regards to claim 15, which depends on claim 9, for performing a method similar to the method performed by the system of claim 6, is rejected under similar rationale.

With regards to claim 16, which depends on claim 9, for performing a method similar to the method performed by the system of claim 7, is rejected under similar rationale.

With regards to claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 1, is rejected under similar rationale.

With regards to claim 19, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 1, is rejected under similar rationale.

With regards to claim 20, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 2, is rejected under similar rationale.

With regards to claim 22, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 4, is rejected under similar rationale.

With regards to claim 23, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 5, is rejected under similar rationale.

With regards to claim 24, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 6, is rejected under similar rationale.

With regards to claim 25, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 7, is rejected under similar rationale.

6. Claims 3, 12, and 21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani (US Patent: 5,438,657, issued: Aug. 1, 1995, filed: Mar. 11, 1993), in view of Niyogi et al (US Patent: 7,197,702 B2, issued: Mar. 27, 2007, filed: Jun. 13, 2003), and further in view of Zlotnick (US Patent: 6,778,703 B1, issued: Aug. 17, 2004, filed: Apr. 19, 2000).

With regards to claim 3, which depends on claim 1, Nakatani teaches wherein the determination system further comprises a comparison *system in the document layout processing device* to compare one or more elements of at least a portion of the original document against each of the portions of the plurality of stored documents, as similarly explained in the rejection for claim 1.

*However, Nakatani does not expressly teach a scoring system in the document layout processing device configured to generate a score for each of the comparisons of the portion of the original document against each of the portions of each of the plurality*

*of stored documents, wherein the determination system identifies the particular stored document with the portion with the score which is closest to the portion of the original document based on the generated scores.*

Zlotnick teaches a determination system further comprises a scoring system that generates a score for *each of the comparisons of the portion of the original document against each of the portions of each of the plurality of stored documents, wherein the determination system identifies the stored document with the portion with the score which is closest to the portion of the original based on the generated scores* (column 2, lines 38-45: whereas, the 'current'/original document/template is, being compared to other document/templates, and a stored document/template is selected based on the closes matching score).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Nakatani and Niyogi et al's determination system such that it would have included a comparison ranking system for selection of the closest matched stored document as taught by Zlotnick. The combination of Nakatani, Niyogi et al, and Zlotnick would have allowed Nakatani's system to have "provided improved methods for automatically identifying which of a plurality of templates (documents) corresponds to a given form document" (Zlotnick, column 2, lines 10-14).

With regards to claim 12, which depends on claim 9, for performing a method similar to the method performed by the system of claim 3, is rejected under similar rationale.

With regards to claim 21, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 3, is rejected under similar rationale.

7. Claims 8, 17, and 26 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani (US Patent: 5,438,657, issued: Aug. 1, 1995, filed: Mar. 11, 1993), in view of Niyogi et al (US Patent: 7,197,702 B2, issued: Mar. 27, 2007, filed: Jun. 13, 2003), and further in view of Wanderski et al (US Patent: 6519617 B1, issued: Feb. 11, 2003, filed: Apr. 8, 1999).

With regards to claim 8, which depends on claim 1, Nakatani et al does not expressly teach *further comprising storing the output, original document with the applied mutators as one of the stored documents*.

However, Wanderski et al teaches a system comprising storing the output, original document with the applied mutators as one of the stored documents (column 14, lines 48-52: whereas, the DTD contains one or more mutators for the document, and the generated output can be stored for later processing).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Nakatani system to have further included the ability to store the output as one of the stored documents as taught by Wanderski et al. The combination of Nakatani, Niyogi et al, and Wanderski et al would have allowed Lopresti

et al's system to have "automatically transformed documents using dynamically – selected transformations" (Wanderski et al, column 4, lines 13-14).

With regards to claim 17, which depends on claim 9, for performing a method similar to the method performed by the system of claim 8, is rejected under similar rationale.

With regards to claim 26, which depends on claim 18, for a computer readable medium, performing a method similar to the method performed by the system of claim 8, is rejected under similar rationale.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.
9. With regards to the 35 USC 101 rejection for claims 1-8, the claimed system, can still be interpreted as a computer program type system, such that the program is used to render/electronically adjust portions of the original document. The examiner recommends the applicant clarify that the system includes an element of hardware, such as a processor, and/or computer readable medium to resolve the 35 USC 101 rejections.
10. The applicant argues in page 3, that "it is clear that in these cited portions, and elsewhere too, Nakatani is disclosing creating an interim form document which can be

further used to create another document having the same layout as the original document. That is Nakatani is leaving the original document untouched and unmodified, which is opposite of what the applicant's are claiming".

11. However, the examiner respectfully points out that the claim language cites "apply one or more mutators to the portion of the original document ..."; and based on the citation, the claim language can be interpreted such that one or more mutators are applied to the portion of data extracted from the original document (which Nakatani teaches, as similarly explained above, and in column 19, lines 3-8). Therefore, the examiner wishes to recommend to the applicant, that the claim language should be clarified such that it explains that the application of the one or more mutators that are applied to the original document data, must also be saved back into the original document.

12. The applicant further argues that since claims 2-8 depend from and contain the limitations of claim 1, claims 10-17 depend from and contain limitations of claim 9, and claims 19-26 depend and contain limitations of claim 8; that they are allowable.

13. However, this argument is not persuasive since, the argued limitations are either responded to/explained-to-be-taught, in the rejection above, and in the response to arguments above.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILSON TSUI whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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